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**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.: 7,350,499

Issue Date: April 1, 2008

Inventor(s): Toshifumi TAKAOKA et al.

Title: CONTROL DEVICE OF CYLINDER REDUCING OPERATION OF  
MULTI-CYLINDER ENGINE

Docket No.: 127243

**Certificate**

JAN 28 2009

**of Correction**

**SECOND REQUEST FOR CERTIFICATE OF CORRECTION UNDER RULE 322**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

It is respectfully requested that a Certificate of Correction be issued in order to correct the errors specified in the attached copy of Certificate of Correction Form PTO-1050.

This Patent issued from a National Stage Application of a PCT Application. The Patent issued with claims 1-6 of the original PCT Application instead of claims 1-5 of the Submission of Annexes to the IPER filed with this application on March 28, 2006. This is a U.S. Patent Office error as evidenced by the following: (1) the Notification of Acceptance indicates that a copy of the Annexes to the International Preliminary Examination Report was received; (2) the Official Filing Receipt listed claims 1-5 (not 1-6) in agreement with the number of claims in the Submission of Annexes; (3) the Notice of Allowance indicates that claims 1-5 are allowed instead of claims 1-6; and (4) the Examiner's reasons for allowance discusses features present in claim 1 of the PCT Annexes, but which are not present in claim 1 from the original PCT Application (for example, that the criteria of judgment are modified by a learning process).

JAN 28 2009

It is believed that the errors are on the part of the Patent and Trademark Office, and therefore no fee is due in relation to this matter in accordance with the provisions of 37 C.F.R. §1.322. However, should any fee be due, please charge the same against Deposit Account No. 15-0461 in order to ensure prompt issuance of a Certificate of Correction.

Respectfully submitted,



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JAO:JHB

Attachment:  
Certificate of Correction, PTO-Form 1050

Date: January 26, 2009

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<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
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JAN 28 2009

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 7,350,499  
DATED : April 1, 2008  
INVENTOR(S) : Toshifumi TAKAOKA; et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Replace claims 1-6 with the following claims 1-5:

1. A control device for cylinder reducing operation in which at least one of cylinders of a multi-cylinder internal combustion engine are selectively inactivated, comprising a detector detecting engine output torque and judging if the cylinder reducing operation is to be executed while referring to the engine output torque detected with the detector; wherein criteria of the judgment of the execution of the cylinder reducing operation are modified through a learning process in which, when an engine is operated in the reduced cylinder mode, an output torque at a certain engine revolution and at a predetermined upper limit of throttle angle is set to the upper limit of engine output torque at the certain engine revolution for the judgment of the execution of the reduced cylinder operation.
2. A device according to claim 1, wherein the judgment of the execution of the cylinder reducing operation based upon the engine output torque is performed by setting out a two-dimensional map of engine revolution and the engine output torque, which map is divided into a normal operation region and a reduced cylinder operation region; and judging which of the normal operation region and the reduced cylinder operation region an engine operation condition is fallen into.
3. A device according to claim 2, wherein the map is modified depending upon engine operating environments.
4. A device according to claim 1, wherein an output shaft of the multi-cylinder engine is operationally linked to an electric motor and an electric generator through a planetary gear and an axle of the planetary gear linked to the motor drives wheels, and the detector detecting engine output torque is the generator.
5. A device according to claim 4, wherein a variation of the output torque from the engine due to a variation of an inertial mass of motion in the engine is compensated based upon the detection of the output torque.

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